

Release notes for ENDF/B Development n-055_Cs_135
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=5531, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=5531, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER    247 TO    292
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=5531, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=5531, MF= 1, MT=451
MOD =      1 OUT OF RANGE      0 -      0      RECORD NUMBER    247
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5531, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY      RECORD NUMBER    294
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY      RECORD NUMBER    637
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY      RECORD NUMBER    697
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY      RECORD NUMBER    757
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY      RECORD NUMBER    771
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 17
SECTION 3/ 17 NOT IN DIRECTORY RECORD NUMBER 781

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 22
SECTION 3/ 22 NOT IN DIRECTORY RECORD NUMBER 787

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 28
SECTION 3/ 28 NOT IN DIRECTORY RECORD NUMBER 801

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 32
SECTION 3/ 32 NOT IN DIRECTORY RECORD NUMBER 813

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 33 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 33
SECTION 3/ 33 NOT IN DIRECTORY RECORD NUMBER 821

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 51
SECTION 3/ 51 NOT IN DIRECTORY RECORD NUMBER 829

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 52
SECTION 3/ 52 NOT IN DIRECTORY RECORD NUMBER 843

14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 53
SECTION 3/ 53 NOT IN DIRECTORY RECORD NUMBER 856

15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 54 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 54 | RECORD NUMBER | 869 |
| SECTION 3/ 54 NOT IN DIRECTORY | | |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT= 91 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT= 91 | RECORD NUMBER | 881 |
| SECTION 3/ 91 NOT IN DIRECTORY | | |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT=102 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT=102 | RECORD NUMBER | 892 |
| SECTION 3/102 NOT IN DIRECTORY | | |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT=103 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT=103 | RECORD NUMBER | 911 |
| SECTION 3/103 NOT IN DIRECTORY | | |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT=104 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT=104 | RECORD NUMBER | 926 |
| SECTION 3/104 NOT IN DIRECTORY | | |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT=105 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT=105 | RECORD NUMBER | 939 |
| SECTION 3/105 NOT IN DIRECTORY | | |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 3, MT=107 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 3, MT=107 | RECORD NUMBER | 951 |
| SECTION 3/107 NOT IN DIRECTORY | | |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 2 (0): Directory (b)
- | | | |
|--|---------------|-----|
| ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 2 | RECORD NUMBER | 968 |
| SECTION 4/ 2 NOT IN DIRECTORY | | |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 16 (0): Directory (b)

- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 16 | |
| | SECTION 4/ 16 NOT IN DIRECTORY | RECORD NUMBER 1124 |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 17 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 17 | |
| | SECTION 4/ 17 NOT IN DIRECTORY | RECORD NUMBER 1135 |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 22 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 22 | |
| | SECTION 4/ 22 NOT IN DIRECTORY | RECORD NUMBER 1146 |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 28 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 28 | |
| | SECTION 4/ 28 NOT IN DIRECTORY | RECORD NUMBER 1157 |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 32 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 32 | |
| | SECTION 4/ 32 NOT IN DIRECTORY | RECORD NUMBER 1168 |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 33 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 33 | |
| | SECTION 4/ 33 NOT IN DIRECTORY | RECORD NUMBER 1179 |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 51 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 51 | |
| | SECTION 4/ 51 NOT IN DIRECTORY | RECORD NUMBER 1190 |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 52 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 52 | |
| | SECTION 4/ 52 NOT IN DIRECTORY | RECORD NUMBER 1218 |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 53 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 53 | RECORD NUMBER | 1246 |
| SECTION 4/ 53 NOT IN DIRECTORY | | |
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 54 | RECORD NUMBER | 1274 |
| SECTION 4/ 54 NOT IN DIRECTORY | | |
33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 4, MT= 91 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 4, MT= 91 | RECORD NUMBER | 1301 |
| SECTION 4/ 91 NOT IN DIRECTORY | | |
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 16 | RECORD NUMBER | 1329 |
| SECTION 5/ 16 NOT IN DIRECTORY | | |
35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 17 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 17 | RECORD NUMBER | 1383 |
| SECTION 5/ 17 NOT IN DIRECTORY | | |
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 22 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 22 | RECORD NUMBER | 1413 |
| SECTION 5/ 22 NOT IN DIRECTORY | | |
37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 28 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 28 | RECORD NUMBER | 1616 |
| SECTION 5/ 28 NOT IN DIRECTORY | | |
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 32 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 32 | RECORD NUMBER | 1738 |
| SECTION 5/ 32 NOT IN DIRECTORY | | |
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 33 (0): Directory (b)

- ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 33
SECTION 5/ 33 NOT IN DIRECTORY RECORD NUMBER 1780
40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF= 5, MT= 91 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF= 5, MT= 91
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 1819
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF=33, MT= 1 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF=33, MT= 1
SECTION 33/ 1 NOT IN DIRECTORY RECORD NUMBER 1956
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF=33, MT= 2 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF=33, MT= 2
SECTION 33/ 2 NOT IN DIRECTORY RECORD NUMBER 2159
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF=33, MT= 4 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF=33, MT= 4
SECTION 33/ 4 NOT IN DIRECTORY RECORD NUMBER 2362
44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF=33, MT= 16 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF=33, MT= 16
SECTION 33/ 16 NOT IN DIRECTORY RECORD NUMBER 2503
45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5531, MF=33, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=5531, MF=33, MT=102
SECTION 33/102 NOT IN DIRECTORY RECORD NUMBER 2525

- **psyche** Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04 / STRENGTH FUNCTION 1.49997E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04
STRENGTH FUNCTION 1.49997E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [5 more lines]
```

2. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04 / STRENGTH FUNCTION 1.50003E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04
STRENGTH FUNCTION 1.50003E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [5 more lines]
```

3. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04 / STRENGTH FUNCTION 1.50000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04
STRENGTH FUNCTION 1.50000E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [9 more lines]
```

4. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04 / STRENGTH FUNCTION 1.50006E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04
STRENGTH FUNCTION 1.50006E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [1 more lines]
```

5. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04 / STRENGTH FUNCTION 1.49994E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49997E-04
STRENGTH FUNCTION 1.49994E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

6. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04 / STRENGTH FUNCTION 1.49996E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04
```



```

                                STRENGTH FUNCTION 1.49996E-04
                                LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [6 more lines]
7. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION
   IS 1.49996E-04 / STRENGTH FUNCTION 1.50004E-04 / LIES OUTSIDE LIMITS
   1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

   FILE 2
     SECTION 151
       ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04
       STRENGTH FUNCTION 1.50004E-04
                                LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [3 more lines]
8. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION
   IS 1.49996E-04 / STRENGTH FUNCTION 1.50000E-04 / LIES OUTSIDE LIMITS
   1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

   FILE 2
     SECTION 151
       ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04
       STRENGTH FUNCTION 1.50000E-04
                                LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [8 more lines]
9. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION
   IS 1.49996E-04 / STRENGTH FUNCTION 1.49992E-04 / LIES OUTSIDE LIMITS
   1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

   FILE 2
     SECTION 151
       ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04
       STRENGTH FUNCTION 1.49992E-04
                                LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
10. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 2.20000E+02. STRENGTH FUNCTION
   IS 1.49996E-04 / STRENGTH FUNCTION 1.50008E-04 / LIES OUTSIDE LIMITS
   1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

   FILE 2
     SECTION 151
       ENERGY = 2.20000E+02. STRENGTH FUNCTION IS 1.49996E-04
       STRENGTH FUNCTION 1.50008E-04
                                LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [3 more lines]

```

- fudge-4.0 Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved / MultiLevelBreitWigner (Error # 0): missingResonanceChannel

WARNING: Missing a channel with angular momenta combination L = 0, J = 2.0 and S = 2.0 for "capture"

2. Potential scattering hasn't converted, you need more L's!
resonances / resolved (Error # 1): potentialScatteringNotConverged

WARNING: Potential scattering hasn't converged by L=0 at E=220.0 eV, xs[0]/xs[0]=100.0% > 0.1%

3. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.25%

4. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.11%

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Cs135): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Cs135): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 ((z,n)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 3 (n[multiplicity:'2'] + Cs134): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (Cs136 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (Cs136 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

- fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.
reaction label 8: n + H1 + Xe134 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6812025.832199097 eV vs -6833630. eV!

2. Calculated and tabulated Q values disagree.
reaction label 9: n + H2 + Xe133 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -13139668.41441345 eV vs -1.30626e7 eV!

3. Calculated and tabulated Q values disagree.
reaction label 10: n + H3 + Xe132 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -13316871.01678467 eV vs -1.33296e7 eV!

4. Calculated and tabulated Q values disagree.
reaction label 13: H1 + Xe135-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -448165.8671722412 eV vs -376530. eV!

5. Calculated and tabulated Q values disagree.
reaction label 14: H2 + Xe134-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -4587459.731262207 eV vs -4523510. eV!

- njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (0): GROUPT/conver (0)

---message from conver---cannot do complete particle production for mt= 16
only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (1): GROUPT/conver (0)

---message from conver---cannot do complete particle production for mt= 17
only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 22
only mf4/mf5 provided

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 28
only mf4/mf5 provided

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 32
only mf4/mf5 provided

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 33
only mf4/mf5 provided

7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (6): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 91
only mf4/mf5 provided